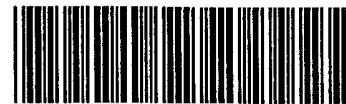


RAW SEQUENCE LISTING

The Biotechnology Systems Branch of the Scientific and Technical
Information Center (STIC) no errors detected.

Application Serial Number: 10/671, 317
Source: 1 FWO
Date Processed by STIC: 11/12/04

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IFWO

RAW SEQUENCE LISTING

DATE: 11/12/2004

PATENT APPLICATION: US/10/671,317

TIME: 16:50:48

Input Set : A:\STK-010C3.ST25.txt

Output Set: N:\CRF4\11122004\J671317.raw

3 <110> APPLICANT: Oppermann, Herman
 4 Kuberasampath, Thangavel
 5 Rueger, David
 6 Ozkaynak, Engin
 8 <120> TITLE OF INVENTION: Osteogenic Devices
 10 <130> FILE REFERENCE: STK-010C3
 12 <140> CURRENT APPLICATION NUMBER: US 10/671,317
 13 <141> CURRENT FILING DATE: 2003-09-25
 15 <150> PRIOR APPLICATION NUMBER: US 09/956,582
 16 <151> PRIOR FILING DATE: 2001-09-19
 18 <150> PRIOR APPLICATION NUMBER: US 09/074,299
 19 <151> PRIOR FILING DATE: 1998-05-07
 21 <150> PRIOR APPLICATION NUMBER: US 08/417,071
 22 <151> PRIOR FILING DATE: 1995-04-04
 24 <150> PRIOR APPLICATION NUMBER: US 08/145,812
 25 <151> PRIOR FILING DATE: 1993-11-01
 27 <150> PRIOR APPLICATION NUMBER: US 07/995,345
 28 <151> PRIOR FILING DATE: 1989-12-22
 30 <150> PRIOR APPLICATION NUMBER: US 07/315,342
 31 <151> PRIOR FILING DATE: 1989-02-23
 33 <150> PRIOR APPLICATION NUMBER: US 07/232,630
 34 <151> PRIOR FILING DATE: 1988-08-15
 36 <150> PRIOR APPLICATION NUMBER: US 07/179,406
 37 <151> PRIOR FILING DATE: 1988-04-08
 39 <160> NUMBER OF SEQ ID NOS: 72
 41 <170> SOFTWARE: PatentIn version 3.3
 43 <210> SEQ ID NO: 1
 44 <211> LENGTH: 96
 45 <212> TYPE: PRT
 46 <213> ORGANISM: Artificial Sequence
 48 <220> FEATURE:
 49 <223> OTHER INFORMATION: Biosynthetic Protein COP5
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 57 Pro Pro Gly Tyr Gln Ala Phe Tyr Cys His Gly Glu Cys Pro Phe Pro
 58 20 25 30
 61 Leu Ala Asp His Phe Asn Ser Thr Asn His Ala Val Val Gln Thr Leu
 62 35 40 45
 65 Val Asn Ser Val Asn Ser Lys Ile Pro Lys Ala Cys Cys Val Pro Thr
 66 50 55 60
 69 Glu Leu Ser Ala Ile Ser Met Leu Tyr Leu Asp Glu Asn Glu Lys Val
 70 65 70 75 80

RAW SEQUENCE LISTING

DATE: 11/12/2004

PATENT APPLICATION: US/10/671,317

TIME: 16:50:48

Input Set : A:\STK-010C3.ST25.txt

Output Set: N:\CRF4\11122004\J671317.raw

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79 <212> TYPE: PRT
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83 <223> OTHER INFORMATION: Biosynthetic protein COP7
85 <400> SEQUENCE: 2
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88 1           5           10           15
91 Pro Pro Gly Tyr His Ala Phe Tyr Cys His Gly Glu Cys Pro Phe Pro
92           20           25           30
95 Leu Ala Asp His Leu Asn Ser Thr Asn His Ala Val Val Gln Thr Leu
96           35           40           45
99 Val Asn Ser Val Asn Ser Lys Ile Pro Lys Ala Cys Cys Val Pro Thr
100          50           55           60
103 Glu Leu Ser Ala Ile Ser Met Leu Tyr Leu Asp Glu Asn Glu Lys Val
104 65           70           75           80
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128 <223> OTHER INFORMATION: wherein Xaa at position 4 can be any amino acid
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132 <222> LOCATION: (6)..(6)
133 <223> OTHER INFORMATION: wherein Xaa at position 6 can be any amino acid
135 <220> FEATURE:
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137 <222> LOCATION: (8)..(8)
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140 <220> FEATURE:
141 <221> NAME/KEY: misc_feature
142 <222> LOCATION: (11)..(11)
143 <223> OTHER INFORMATION: wherein Xaa at position 11 can be any amino acid
145 <220> FEATURE:
146 <221> NAME/KEY: misc_feature

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RAW SEQUENCE LISTING

DATE: 11/12/2004

PATENT APPLICATION: US/10/671,317

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Input Set : A:\STK-010C3.ST25.txt

Output Set: N:\CRF4\11122004\J671317.raw

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148 <223> OTHER INFORMATION: wherein Xaa at position 12 can be any amino acid
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152 <222> LOCATION: (14)..(14)
153 <223> OTHER INFORMATION: wherein Xaa at position 14 can be any amino acid
155 <220> FEATURE:
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157 <222> LOCATION: (15)..(15)
158 <223> OTHER INFORMATION: wherein Xaa at position 15 can be any amino acid
160 <220> FEATURE:
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162 <222> LOCATION: (16)..(16)
163 <223> OTHER INFORMATION: wherein Xaa at position 16 can be any amino acid
165 <220> FEATURE:
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167 <222> LOCATION: (18)..(18)
168 <223> OTHER INFORMATION: wherein Xaa at position 18 can be any amino acid
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172 <222> LOCATION: (20)..(20)
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175 <220> FEATURE:
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180 <220> FEATURE:
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183 <223> OTHER INFORMATION: wherein Xaa at position 23 can be any amino acid
185 <220> FEATURE:
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187 <222> LOCATION: (26)..(26)
188 <223> OTHER INFORMATION: wherein Xaa at position 26 can be any amino acid
190 <220> FEATURE:
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192 <222> LOCATION: (28)..(28)
193 <223> OTHER INFORMATION: wherein Xaa at position 28 can be any amino acid
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197 <222> LOCATION: (30)..(31)
198 <223> OTHER INFORMATION: wherein Xaa at positions 30-31 can be any amino acid
200 <220> FEATURE:
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202 <222> LOCATION: (33)..(40)
203 <223> OTHER INFORMATION: wherein Xaa at positions 33-40 can be any amino acid
205 <220> FEATURE:
206 <221> NAME/KEY: misc_feature
207 <222> LOCATION: (44)..(45)

RAW SEQUENCE LISTING

DATE: 11/12/2004

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Input Set : A:\STK-010C3.ST25.txt

Output Set: N:\CRF4\11122004\J671317.raw

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222 <222> LOCATION: (54)..(57)
223 <223> OTHER INFORMATION: wherein Xaa at position 54-57 can be any amino acid
225 <220> FEATURE:
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227 <222> LOCATION: (59)..(60)
228 <223> OTHER INFORMATION: wherein Xaa at positions 59-60 can be any amino acid
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232 <222> LOCATION: (63)..(63)
233 <223> OTHER INFORMATION: wherein Xaa at position 63 can be any amino acid
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237 <222> LOCATION: (65)..(72)
238 <223> OTHER INFORMATION: wherein Xaa at position 65-72 can be any amino acid
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242 <222> LOCATION: (74)..(74)
243 <223> OTHER INFORMATION: Xaa can be any naturally occurring amino acid
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247 <222> LOCATION: (75)..(80)
248 <223> OTHER INFORMATION: wherein Xaa at position 75-80 can be any amino acid
250 <220> FEATURE:
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253 <223> OTHER INFORMATION: wherein Xaa at position 82 can be any amino acid
255 <220> FEATURE:
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257 <222> LOCATION: (84)..(85)
258 <223> OTHER INFORMATION: wherein Xaa at positions 84-85 can be any amino acid
260 <220> FEATURE:
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267 <222> LOCATION: (90)..(90)
268 <223> OTHER INFORMATION: wherein Xaa at position 90 can be any amino acid

RAW SEQUENCE LISTING

DATE: 11/12/2004

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Input Set : A:\STK-010C3.ST25.txt

Output Set: N:\CRF4\11122004\J671317.raw

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 291 Pro Xaa Gly Xaa Xaa Ala Xaa Tyr Cys Xaa Gly Xaa Cys Xaa Xaa Pro
 292 20 25 30
 295 Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Asn His Ala Xaa Xaa Gln Xaa Xaa
 296 35 40 45
 299 Val Xaa Xaa Xaa Asn Xaa Xaa Xaa Xaa Pro Xaa Xaa Cys Cys Xaa Pro
 300 50 55 60
 303 Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Leu Xaa Xaa Xaa Xaa Xaa Xaa
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 326 <222> LOCATION: (2)..(5)
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 342 <223> OTHER INFORMATION: wherein Xaa at position 11 can be any amino acid
 344 <220> FEATURE:

RAW SEQUENCE LISTING ERROR SUMMARY
 PATENT APPLICATION: US/10/671,317

DATE: 11/12/2004
 TIME: 16:50:49

Input Set : A:\STK-010C3.ST25.txt
 Output Set: N:\CRF4\11122004\J671317.raw

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:3; Xaa Pos. ~~2,4,6,8,11,12,14,15,16,18,20,21,23,26,28,30,31,33,34,35,36~~
 Seq#:3; Xaa Pos. ~~37,38,39,40,44,45,47,48,50,51,52,54,55,56,57,59,60,63,65~~
 Seq#:3; Xaa Pos. ~~66,67,68,69,70,71,72,74,75,76,77,78,79,80,82,84,85,87,88~~
 Seq#:3; Xaa Pos. ~~90,92,93,95,97~~
 Seq#:4; Xaa Pos. ~~2,3,4,5,7,9,11,13,16,17,19,20,21,23,25,26,28,31,33,35,36~~
 Seq#:4; Xaa Pos. ~~38,39,40,41,42,43,44,45,49,50,52,53,55,56,57,59,60,61,62~~
 Seq#:4; Xaa Pos. ~~64,65,68,70,71,72,73,74,75,76,77,79,80,81,82,83,84,85,87~~
 Seq#:4; Xaa Pos. ~~89,90,92,93,95,97,98,100,102~~
 Seq#:5; Xaa Pos. ~~2,4,6,8,11,12,14,15,16,18,20,21,23,26,28,30,31,33,34,35,36~~
 Seq#:5; Xaa Pos. ~~37,38,39,40,44,45,47,48,50,51,52,54,55,56,57,59,60,63,66~~
 Seq#:5; Xaa Pos. ~~67,68,69,70,71,72,73,75,76,77,78,79,80,81,83,85,86,87,88~~
 Seq#:5; Xaa Pos. ~~89,91,92,93,95~~
 Seq#:6; Xaa Pos. ~~2,3,4,5,7,10,12,15,16,18,19,20,22,24,25,27,30,32,34,35,37~~
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 Seq#:30; Xaa Pos. 15
 Seq#:31; Xaa Pos. 4,10
 Seq#:32; Xaa Pos. 15,16
 Seq#:33; Xaa Pos. 2
 Seq#:35; Xaa Pos. 13,16
 Seq#:36; Xaa Pos. 19
 Seq#:37; Xaa Pos. 12,14,17,18
 Seq#:38; Xaa Pos. 2,8,10,12,13,19,21,22
 Seq#:52; Xaa Pos. 93

VERIFICATION SUMMARY

DATE: 11/12/2004

PATENT APPLICATION: US/10/671,317

TIME: 16:50:49

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Output Set: N:\CRF4\11122004\J671317.raw

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M:341 Repeated in SeqNo=3
L:481 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4 after pos.:0
M:341 Repeated in SeqNo=4
L:875 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5 after pos.:0
M:341 Repeated in SeqNo=5
L:1381 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 after pos.:0
M:341 Repeated in SeqNo=6
L:1995 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:30 after pos.:0
L:2020 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:31 after pos.:0
L:2040 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:32 after pos.:0
L:2064 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:33 after pos.:0
L:2107 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:35 after pos.:0
L:2135 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:36 after pos.:16
L:2165 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:37 after pos.:0
M:341 Repeated in SeqNo=37
L:2219 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:38 after pos.:0
M:341 Repeated in SeqNo=38
L:2846 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:52 after pos.:80